



US006094180A

United States Patent [19]

Mead, Jr. et al.

[11] Patent Number: **6,094,180**[45] Date of Patent: ***Jul. 25, 2000**[54] **GIMBAL-MOUNTED VIRTUAL REALITY DISPLAY SYSTEM**[75] Inventors: **Russell C. Mead, Jr.**, San Francisco; **Mark Bolas**, Mountain View; **Ian McDowall**, Palo Alto, all of Calif.[73] Assignee: **Fakespace, Inc.**, Mountain View, Calif.

[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: **08/630,948**[22] Filed: **Apr. 5, 1996**[51] Int. Cl.⁷ **G09G 5/00**[52] U.S. Cl. **345/8; 345/156; 248/603; 361/681; 434/43**

[58] Field of Search 248/188.1, 603, 248/160, 622, 163.1, 274.1, 188.3, 188.7; 345/8, 156, 157, 161, 7, 9; 434/35, 36, 37, 38, 39, 40, 41, 42, 43, 44; 361/681, 682; 359/427

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[57] **ABSTRACT**

A compliant structure which includes a sensor for sensing translation and rotation of a top plate is disclosed. The structure is composed of a base plate and three supporting legs. The legs are compliant. The deflections of the structure are substantially in a plane and the translation and twist of the top platform may be measured by the gimbaled sensor assembly attached to one of the legs.

5 Claims, 7 Drawing Sheets